DEPARTMENT OF THE NAVY

NAVAL AIR SYSTEMS COMMAND
NAVAL AIR SYSTEMS COMMAND HEADQUARTERS
WASHINGTON, DC 20361

NAVAIRINST 5400.107 AIR-541 28 Apr 1983

NAVAIR INSTRUCTION 5400.107

From: Commander, Naval Air Systems Command

Subj: Naval Air Systems Command Headquarters (NAVAIRSYSCOM HQ) - Naval Ordnance Station (NAVORDSTA), Indian Head, MD Systems Engineering Cognizant Agreement (ECA); promulgation of

- Ref: (a) NAVAIRNOTE 5400 of 17 Sep 1979, Master list of engineering cognizance assignments
 - (b) NAVAIRINST 5400.14C, The Cognizant Field Activity Program
 - (c) NAVAIRINST 3900.8A, AIRTASK and Work Unit assignments to field activities
- Encl: (1) Systems Engineering Cognizant Agreement between Naval Air Systems
 Command Headquarters and the Naval Ordnance Station, Indian Head,
 Maryland (Aircraft Rocket Systems)
- 1. <u>Purpose</u>. The purpose of this instruction is to promulgate the systems ECA between NAVAIRSYSCOM HQ and NAVORDSTA, Indian Head, MD, concerning the transfer of systems engineering cognizance of aircraft rocket systems, enclosure (1). Maintenance engineering for these equipments is tasked separately by NAVAIRSYSCOM HQ, Airborne Weapons Logistics Division (AIR-420) through separate AIRTASKS and Work Unit assignments.
- 2. <u>Cancellation</u>. This instruction supersedes those engineering cognizance assignments listed in reference (a) for aircraft rocket systems and system and/or subsystem components.
- 3. <u>Definitions</u>. The terms used in this instruction and its enclosure are defined in reference (b).
- 4. Policy. The policies upon which the systems ECA promulgated by this instruction is based are set forth in reference (b).
- 5. Action. The parties to the systems ECA promulgated by this instruction shall take action as indicated below:
 - a. NAVAIRSYSCOM HQ Program Manager for Rocket Systems (AIR-541) will:
- (1) Issue AIRTASKS in accordance with reference (c) transferring systems engineering cognizance of specific service equipments of the type and class covered by enclosure (1).
- (2) Schedule and provide the resources necessary to permit the systems cognizant field activity (CFA) for aircraft rocket systems, the

NAVORDSTA, Indian Head, MD, to assume the responsibilities assigned by enclosure (1) and the associated AIRTASK assignments for specific equipment.

(3) Assist the systems CFA in assuming the assigned responsibilities.

b. NAVORDSTA, Indian Head, MD will:

- (1) As the systems CFA for aircraft rocket systems, discharge the responsibilities assigned and exercise the authority delegated (or not withheld) in accordance with the policy and procedural constraints contained within reference (b), the enclosed systems ECA, and AIRTASK assignments for specific service equipment.
- (2) Replace Pacific Missile Test Center (PACMISTESTCEN) and NAVAIR-SYSCOM HQ as CFAs, as listed in reference (a), for the following components of the rocket systems:
 - (a) Motor, 5-Inch Rocket, all Marks and Mods.
 - (b) Motor, 2.75-Inch Rocket, all Marks and Mods.
 - (c) Container, 5-Inch Rocket, all Marks and Mods.
 - (d) Container, 2.75-Inch Rocket, all Marks and Mods.
- c. PACMISTESTCEN will assume cognizance as CFA, reference (a), for the following components of the rocket systems:
 - (1) Launcher, 5-Inch Rocket, all Marks and Mods.
 - (2) Launcher, 2.75-Inch Rocket, all Marks and Mods.
- d. Naval Surface Weapons Center will replace PACMISTESTCEN as CFA, reference (a), for the following components of the rocket systems:
- (1) Warheads and Fuzes, 5-Inch Rocket, all Marks and Mods (except Smoke/Marking and Illumination warheads).
- (2) Warheads and Fuzes, 2.75-Inch Rocket, all Marks and Mods (except Smoke/Marking and Illumination warheads).
- e. Naval Weapons Support Center will replace PACMISTESTCEN as CFA, reference (a), for the following components of the rocket systems:
- (1) Warheads, 5-Inch Rocket, Smoke/Marking and Illumination, all Marks and Mods.

- (2) Warheads, 2.75-Inch Rocket, Smoke/Marking and Illumination, all Marks and Mods.
- 6. Forms. NAVAIR Form 13050/2, CCB Change Request/Directive, NAVAIR Form 13050/2A, CCB Change Request Supplement Government Furnished Equipment (GFE) Active Contracts, NAVAIR Form 13050/2B, CCB Change Request Supplement Government Furnished Equipment (GFE) Completed Contracts, NAVAIR Form 13050/2C, CCB Change Request Supplement Ground Support Equipment, NAVAIR Form 13051/4, Cost and Funding Summary, NAVAIR Form 13051/5, Milestone Chart, and NAVAIR Form 13051/9, Controlling Custodian ECP Incorporation Plan, may be obtained from NAVAIR HQ (APC-10).

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Assistant Commander for
Systems and Engineering

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SYSTEMS ENGINEERING COGNIZANT AGREEMENT BETWEEN NAVAL AIR SYSTEMS COMMAND HEADQUARTERS AND NAVAL ORDNANCE STATION, INDIAN HEAD, MARYLAND

Ref: (a) NAVAIRINST 5400.14C, The Cognizant Field Activity Program

(b) NAVAIRINST 4130.1A, NAVAIRSYCOM Configuration Management Manual

Encl: (1) Cognizant Field Activity Task Priority Classification

- The purpose of this agreement is to establish the policies, procedures, and responsibility assignments; the related understandings and agreements; and the delegation of authority which will apply in the transfer or reassignment of in-service functions on specific service equipment from Naval Air Systems Command Headquarters (NAVAIRSYSCOM HQ) to the Naval Ordnance Station (NAVORDSTA) Indian Head, Maryland. This systems engineering cognizant agreement (ECA) establishes NAVORDSTA as the systems cognizant field activity (CFA) for aircraft rocket systems: 5.0-Inch Zuni Rocket System and 2.75-Inch Rocket System. For rocket systems integration of the system components, the following assignments are made as component CFAs: rocket motors, NAVORDSTA; launchers, Pacific Missile Test Center; warheads (except smoke/marking and illumination) and fuzes, Naval Surface Weapons Center; and warheads (smoke/marking and illumination) Naval Weapons Support Center. Any overall CFA responsibilities assigned to these field activities for commodity lines, moreover, continue in effect except as specified herein for rocket systems integration.
- 2. Applicability. This agreement is applicable only to the transfer of systems engineering cognizance covering the following service equipment under the cognizance of component CFAs. System configuration management will include use of interface control drawings and specifications as appropriate.
 - a. Rocket System, 5.0-Inch Zuni
 - (1) Motors, 5-Inch Rocket, all Marks and Mods
 - (2) Warheads, 5-Inch Rocket, all Marks and Mods
 - (3) Fuzes, 5-Inch Rocket, all Marks and Mods
 - (4) Launchers, 5-Inch Rocket, all Marks and Mods
 - (5) Containers, 5-Inch Rocket, all Marks and Mods
 - b. Rocket System, 2.75-Inch
 - (1) Motors, 2.75-Inch Rocket, all Marks and Mods
 - (2) Warheads, 2.75-Inch Rocket, all Marks and Mods
 - (3) Fuzes, 2.75-Inch Rocket, all Marks and Mods
 - (4) Launchers, 2.75-Inch Rocket, all Marks and Mods
 - (5) Containers, 2.75-Inch Rocket, all Marks and Mods
- 3. <u>Definitions</u>. For purposes of this agreement the definitions of terms provided in reference (a) are applicable.

- 4. <u>Background</u>. Reference (a) established the requirement for, and the policies and procedures intended to govern, the reassignment of in-service functions from NAVAIRSYSCOM HQ organizational elements to selected field activities. It also delineated the responsibilities assigned and the authority delegated to field activity commanders to permit them to assume and discharge the inservice responsibilities for specific service equipment when assigned by an AIRTASK. The policies, procedures, requirements, and guidelines set forth in that reference apply in this agreement. In the event that any statement in this agreement conflicts with reference (a), reference (a) will prevail.
- 5. Responsibility Assignment. The responsibilities to be assumed by the NAVORDSTA, Indian Head, MD, incident to this agreement pertain to the management (coordination, control and administration) of in-service functions for assigned service equipment. They embrace those which, prior to this reassignment, were discharged by the Systems and Engineering (AIR-05) group in NAVAIR-SYSCOM HQ. These responsibilities include, but are not limited to, the following:

a. General

- (1) Transfer Record. Establish, maintain, and provide to cognizant NAVAIRSYSCOM HQ groups, a list of all service equipment for which cognizance of in-service functions has been transferred to NAVORDSTA, Indian Head, MD, and the name and telephone number of the engineering/logistics manager designated for each item or equipment grouping.
- (2) <u>Budgeting</u>. Develop, coordinate, and submit to NAVAIRSYSCOM HQ cognizant division annual budget and manpower requirements for the performance of functions on assigned and planned equipment.
- (3) Work Load Management. Establish and maintain a work load management and reporting system. The system shall provide a record of each task undertaken, including those assigned to a contractor or participating field activity, and its priority categorized in accordance with enclosure (1) hereto. Reports shall be divided by priority and for each task shall provide a brief description of the task, the origin of reference, estimated completion date and remarks, as appropriate. Five copies of the report shall be sent to NAVAIRSYSCOM HQ Armament Systems Division (AIR-541). This reporting is in accordance with assigned AIRTASK(s).
- (4) <u>Funding</u>. All funding resources required for discharge of system ECA responsibilities, including those required and/or designated for support of component CFAs, shall be assigned to and under the control of the systems CFA.

b. Basic Design Engineering (BDE)

(1) Prepare and submit to NAVAIRSYSCOM HQ (AIR-541) recommendations concerning safety-of-flight or other operational restrictions.

- (2) In accordance with existing instructions, notifiy (for information only) using commands of any hazardous or unusual conditions pending issuance of appropriate directive by NAVAIRSYSCOM HQ.
- (3) Review all available failure data to determine the nature and extent of design deficiencies indicated thereby and the desirability and/or necessity for design related corrective action. Apply the principles of value engineering wherever appropriate.
- (4) Perform design engineering studies to determine solutions to fleet related problems.
- (5) Submit locally generated preliminary engineering change proposals (ECPs), value engineering change proposals (VECPs), value engineering proposals (VEPs), and if approved or when directed, formal ECPs, VECPs, VEPs, to NAVAIRSYSCOM HQ (AIR-541), for approval in accordance with DOD-STD-480A, DOD Handbook 5010.8H and reference (b). (NOTE: NAVAIR Forms 13050/2, 2A, 2B, 2C (CCB Change Request and supplements), as applicable, and NAVAIR Form 13051/4, Cost and Funding Summary, NAVAIR Form 13051/5, Milestone Chart, and NAVAIR Form 13051/9, Controlling Custodian ECP Incorporation Plan, will be submitted along with each Class I ECP. The forms shall be signed by the commanding officer or his/her designated senior representative in the signature block titled "Program Manager/Coordinator.")
- (6) When Class I engineering changes have been approved, manage, or when appropriate, accomplish the BDE (development, test, evaluation, and quality assurance) tasks required for implementation of the change. (All design modifications being considered for equipment still in production must be coordinated with producing contractors and NAVAIRSYSCOM HQ to avoid undesirable duplication of effort or unnecessarily high contractor technical data costs.)
 - (7) Provide technical consultation and liaison services as required.
- (8) Keep informed concerning NAVAIRSYSCOM HQ development projects/programs which relate to or would ultimately impact the design of assigned equipment.
- (9) Evaluate and process rapid action minor engineering changes (RAMECS) in accordance with NAVAIR Instruction 5215.10B.
- (10) Evaluate suggestions concerning engineering and design of assigned equipment and issue replies thereto.
- (11) Provide certified up-to-date documentation packages to procuring activities when required for reprocurement action.
 - (12) Maintain original drawings in an up-to-date status by:
- (a) Updating to reflect approved Class I ECPs (including RAMECS) and incorporated Class II changes.
- (b) Exercising management control over contractor drawing updates.

- (13) Provide BDE support of ongoing production and reprocurement programs for assigned service equipment. This support shall include but not be limited to the following:
- (a) Review of and submission to the procuring activity, recommendations concerning production contractor Class I ECPs.
- (b) Execution and processing of NAVAIR CCB Change Request Forms 13050/2, 2A, 2B, 2C, as applicable, and NAVAIR Forms 13051/4, 5, and 9 for all changes recommended for approval.
- (c) Review and technical approval of Class II changes and requests for minor deviations and waivers when specified in procurement contracts or authorized by subsequent correspondence from the procuring activity.
- (d) Analysis of user and producer reported failure and defect information and quality trends for purposes of assessing product quality status and assisting in the resolution of existing and potential quality control and equipment reliability and maintainability problems.
- (e) Conduct of technical reviews of contractor manufacturing operations, as necessary, to monitor compliance with applicable contract requirements. (Such reviews may not be conducted without authorization from the procuring activity.)
 - (f) Conduct of required preproduction/first article testing.
- (g) Conduct of Government acceptance test programs or the provision of support therefor.
- (h) Conduct of technical reviews of technical manuals and changes thereto in support of Naval Air Technical Services Facility.
- (i) Participate in scheduled configuration audits as requested by NAVAIRSYSCOM HQ.
- (j) Provide assistance to contractors in achieving solutions to technical problems encountered during the manufacturing process.
- (k) Participate in quality audits, pre and post-award surveys and contractor-contracting officer technical meetings and conferences.
- (1) Technical review of and recommendation of approval/disapproval action on unsolicited proposals concerning assigned service equipment or portions thereof.
- (m) Provide technical assistance to cognizant inventory control points, i.e., supply, part substitution, item reduction studies, source, maintenance and recoverability code changes, etc.

- (n) Review and approve all contractually established in-process and factory acceptance test procedures and all proposed modifications thereto.
- (o) Review and approve Government acceptance test plans and review the results thereof.

6. Delegation of Authority

- a. Except as specified below, this agreement delegates such authority as may be deemed necessary by either party to enable effective discharge of AIR-TASK assignments of in-service functions responsibilities. Decisions made concerning engineering matters pertaining to service equipments, for which engineering/logistics cognizance has been transferred, will not normally require approval by NAVAIRSYSCOM HQ. Since the provision of resources required for performance of in-service functions and the operational effectiveness of service equipment remain the continuing responsibility of NAVAIRSYSCOM HQ, authority to perform the following functions is withheld and not delegated by this agreement:
- (1) Taking action which would ground, forbid operation or otherwise reduce or limit the operational effectiveness of a service equipment or system.
- (2) Removing or altering the operating restrictions or specified service life limitations.
- (3) Approving or disapproving Class I engineering changes or major/critical deviations or waivers (reference (b) applies), except that the CFA is delegated full authority and responsibility to determine organic capability for, establish procedures for, and qualify the manufacture of dynamic, critical and technically restricted parts for assigned equipment when required for stop-gap emergency procurement where a redesign of a part is not involved. The CFA will document the procedures of manufacture and parts qualification and make the documentation available upon request.
- (4) Issuing or approving the issuance of technical directives other than bulletin directives that do not violate paragraph 6(a)(1) above.
- (5) Conducting investigations or generating ECPs requiring extensive engineering effort and/or resulting in expensive implementation programs.
- (6) Designing, developing, procuring, or manufacturing support equipment items, adding to or deleting from, or changing fleet support equipment allowance lists except under the provisions of NAVAIR Instruction 4855.4A.
- (7) Procuring service equipment (or its associated peculiar support equipment) for service use, except under the provisions of NAVAIR Instruction 4720.4.
- (8) Taking action to acquire, in-house or elsewhere, the facilities (special projects, equipment, military construction, etc.) required to discharge the engineering/logistics cognizance functions.

(9) Initiating work which

- (a) is beyond the scope of reference (a), this cognizant agreement, and AIRTASKs assigning in-service functions responsibilities;
- (b) costs more than budgeted or provided funds or which will cause funds to be diverted from carrying out responsibilities listed in assigning AIRTASKS or this agreement;
 - (c) will alter headquarters established work load priorities; or
- (d) will require personnel in excess of the currently authorized manning level.
- (10) Approving for service use or acquiring new equipment designed to replace and/or complement existing equipment.
- b. Authority to perform any or all of these functions may be delegated for specific equipment in the assigning AIRTASK or by other correspondence issued by cognizant NAVAIRSYSCOM HQ authority.

7. Miscellaneous

- a. <u>ECP Requests</u>. The cognizant NAVAIRSYSCOM HQ group will, whenever appropriate, request via the NAVAVNLOGCEN (Code 310) a preliminary ECP (as defined in DOD-STD-480A) and upon receipt thereof, ensure that both the technical approach and estimated cost are satisfactory before authorizing and identifying funding for the preparation of a fully engineered and documented formal ECP. The engineering manager shall ensure that each preliminary ECP submitted is sufficiently detailed and accurate to support a NAVAIRSYSCOM HQ decision to order the formal ECP or to abandon further effort.
- b. Task Priority Classification. Field activity task priority classifications are contained in enclosure (1).
- c. Equipment Assignments. When engineering cognizance of a specific service equipment is transferred by AIRTASK assignment under this agreement, it will be assumed that all component parts of the identified system, subsystem or equipment which are peculiar to it are included in the transfer. Any assignments of engineering cognizance of such equipment to other CFAs will be identified in an exception list included as part of the assigning AIRTASK.

APPROVED

FRED S. UNDERWOOD, Capt. (USN)

Commanding Officer Naval Ordnance Station Indian Head, Maryland Date: 19 AUG 1982

Assistant Commander for Systems and Engineering Naval Air Systems Command Date: 22 November 1982

Combat Systems
Naval Sea Systems Command
Date: 15Feb 1983

Deputy Commander for

COGNIZANT FIELD ACTIVITY

TASK PRIORITY CLASSIFICATIONS

PRIORITY 1

EMERGENCY

Definition

This classification shall be used for safety of flight conditions, the uncorrected existence of which would probably result in fatal or serious injury to personnel, and extensive damage or destruction of property. Such conditions embody risks calculated to be intolerable or tolerable within extremely narrow time limits and necessitate the immediate imposition of operating restrictions. Therefore, "Emergency" classification involves discontinued use of aircraft or equipment in the operational employment under which adverse safety conditions exist pending incorporation of directed corrective action.

Action Required by Cognizant Field Activity

- 1. All possible effort for solution, at the expense of any other task of lower priority, if required.
- 2. Establishment of a specific target date for completion of the task.
- 3. Maintaining and providing all concerned a documented weekly status report until completion of task.
- 4. Immediate notification to the Commander, Naval Air Systems Command (NAVAIR-SYSCOM HQ) Armament Systems Division (AIR-541) and Naval Aviation Logistics Center (NAVAVNLOGCEN) of any delays or anticipated delays and reasons therefor.

PRIORITY 2

URGENT

Definition

This classification shall be used for potential safety of flight conditions which do not necessitate an "Emergency" classification but will have a serious impact on Fleet operations or logistics support thereto. The classification is for those conditions which, if uncorrected, could result in personnel injury or property damage. Such conditions embody risk calculated to be tolerable within narrow time limits and may or may not necessitate the imposition of operating restrictions.

Action Required by Cognizant Field Activity

1. All possible effort for solution, at the expense of any other task of lower priority but not to interfere with tasks classifed "Emergency".

- 2. Establishment of specific target date for completion of tasks.
- 3. Maintaining and providing all concerned a documented quarterly status report until completion of task.
- 4. Immediate notification to NAVAIRSYSCOM HQ (AIR-541) and NAVAVNLOGCEN of any delays or anticipated delays and reasons therefor.

PRIORITY 3

ROUTINE

Definition

This classification shall be used for conditions which if uncorrected could, under prolonged usage or operation, result in personnel injury or property damage, or have adverse effect on the operation, maintenance, or support of affected equipments. Such conditions are calculated to be tolerable within broad time limits. Tasks in this or "Deferrable" classification will generally provide for design, maintenance, and reliability improvements.

Action Required by Cognizant Field Activity

- 1. Establishment of general target dates for completion dependent on subsequent upgrading or downgrading of priority by NAVAIRSYSCOM HQ (AIR-541) or NAVAVNLOGCEN, if circumstances dictate.
- 2. Maintaining and providing all concerned a documented semiannual status report of completion, progress, or delays.

PRIORITY 4

DEFERRABLE

Definition

This classification will be used for those "Routine" tasks which are deemed to be of the lowest priority which must be delayed or dropped because of the following reasons:

- a. Shortage of personnel in the area of investigation.
- b. Shortage of facilities/equipment.
- c. Actual or predicted shortage of current funding.

Action Required by Cognizant Field Activity

Maintaining and providing all concerned a documented semiannual report of items in this category.